



US009539261B2

(12) **United States Patent**  
**Kelleher-Andersson**

(10) **Patent No.:** **US 9,539,261 B2**  
(45) **Date of Patent:** **\*Jan. 10, 2017**

(54) **METHODS AND COMPOSITIONS FOR  
STIMULATING NEUROGENESIS AND  
INHIBITING NEURONAL DEGENERATION**

31/4172; A61K 31/496; A61K  
31/439; A61K 31/445; C07D  
413/04; C07D 401/04; C07D  
215/54; C07D 471/10

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See application file for complete search history.

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(\*) Notice: Subject to any disclaimer, the term of this  
patent is extended or adjusted under 35  
U.S.C. 154(b) by 0 days.

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This patent is subject to a terminal dis-  
claimer.

(21) Appl. No.: **14/679,874**

(22) Filed: **Apr. 6, 2015**

(65) **Prior Publication Data**

US 2015/0209371 A1 Jul. 30, 2015

#### Related U.S. Application Data

(63) Continuation of application No. 13/231,584, filed on  
Sep. 13, 2011, now Pat. No. 8,999,972, which is a  
continuation of application No. 12/066,640, filed as  
application No. PCT/US2006/036463 on Sep. 19,  
2006, now Pat. No. 8,039,462.

(60) Provisional application No. 60/822,202, filed on Aug.  
11, 2006, provisional application No. 60/718,691,  
filed on Sep. 19, 2005.

(51) **Int. Cl.**

**A61K 31/5513** (2006.01)  
**A61K 31/47** (2006.01)  
**A61K 31/46** (2006.01)  
**A61K 31/454** (2006.01)  
**A61K 31/551** (2006.01)  
**A61K 31/4172** (2006.01)  
**A61K 31/496** (2006.01)  
**C07D 413/04** (2006.01)  
**C07D 401/04** (2006.01)  
**C07D 215/54** (2006.01)  
**C07D 471/10** (2006.01)  
**A61K 31/439** (2006.01)  
**A61K 31/445** (2006.01)

(52) **U.S. Cl.**

CPC ..... **A61K 31/5513** (2013.01); **A61K 31/4172**  
(2013.01); **A61K 31/439** (2013.01); **A61K**  
**31/445** (2013.01); **A61K 31/454** (2013.01);  
**A61K 31/46** (2013.01); **A61K 31/47** (2013.01);  
**A61K 31/496** (2013.01); **A61K 31/551**  
(2013.01); **C07D 215/54** (2013.01); **C07D**  
**401/04** (2013.01); **C07D 413/04** (2013.01);  
**C07D 471/10** (2013.01)

(58) **Field of Classification Search**

CPC .... **A61K 31/5513**; **A61K 31/47**; **A61K 31/46**;  
**A61K 31/454**; **A61K 31/551**; **A61K**

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(57) **ABSTRACT**

The present invention provides methods and compositions  
comprising compounds useful for stimulating neurogenesis.  
The methods and compositions comprising compounds are  
also useful for inhibiting neuronal degeneration. Thus, the  
present invention can be used in the treatment of diseases  
and conditions characterized by neuronal loss and reduced  
neurogenesis including Alzheimer's disease, stroke, trau-  
matic brain injury, and depression. This invention could also  
be used for research products including single agents or  
mixtures of agents to promote, proliferate, differentiate, or  
maintain neurons from stem or progenitor cells.

**21 Claims, No Drawings**